

Application No. 09/960,735

Entry of the amendments is proper under 37 CFR §1.116 since the amendments: (a) place the application in condition for allowance for the reasons discussed herein; (b) do not raise any new issues requiring further search and/or consideration; and (c) place the application in better form for appeal, should an appeal be necessary. Entry of the amendments is thus respectfully requested.

Claims 1, 2, 4-10, 12 and 21 are rejected under 35 U.S.C. §103 as unpatentable over U.S. Patent No. 4,402,129 to Kreuzer et al. (Kreuzer) in view of U.S. Patent No. 5,998,903 to Umeda et al. (Umeda). The rejection is respectfully traversed.

Applicant asserts that neither Kreuzer or Umeda, whether considered alone or in combination, disclose or suggest all of the features recited in the rejected claims. For example, neither Kreuzer or Umeda disclose or suggest a rotary electric machine, or an alternator for a vehicle, comprising a stator having a stator coil and a poly-phase stator winding wherein each phase winding of the poly-phase stator winding has a plurality of coils, as recited in the rejected claims. As discussed and agreed during the personal interview, the amendment to the claims distinguish over the applied references.

Accordingly, Applicants request the rejection of claims 1, 2, 4-10, 12 and 21 under 35 U.S.C. §103(a) be withdrawn. Therefore, the combination of the applied references does not disclose or suggest each and every feature recited in the rejected claims.

Claims 13 and 14 are rejected under 35 U.S.C. §103(a) as unpatentable over Kreuzer in view of Umeda as applied to claim 1, and further in view of U.S. Patent No. 5,886,444 to Enomoto et al. (Enomoto). The rejection is respectfully traversed.

Applicants assert that claims 13 and 14 are allowable for at least their dependency on their base claim for the reasons discussed above, as well as for the additional features recited therein. Accordingly, Applicants respectfully request rejection of claims 13 and 14 under 35 U.S.C. §103(a) be withdrawn.

Application No. 09/960,735


Claim 15 is rejected under 35 U.S.C. §103(a) as unpatentable over Kreuzer in view of Umeda as applied to claim 1, and further in view of U.S. Patent No. 4,102,040 to Rich. The rejection is respectfully traversed.

Applicants assert that claim 15 is allowable for its dependency on its base claim, as well as for the additional features recited therein. Accordingly, Applicants respectfully request the rejection of claim 15 under 35 U.S.C. §103(a) be withdrawn.

In view of the foregoing, reconsideration of the application is requested. It is submitted that the claims as presented herein patentably distinguish over the applied references and fully meet the requirements of 35 U.S.C. §112. Accordingly, allowance of claims 1, 2, 4-10, 12-15 and 21-33 is respectfully solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number set forth below.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

John W. Fitzpatrick
Registration No. 41,018

JAO:JWF/ldg

Date: March 14, 2003

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

COURTESY COPY

DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461
--

Docket No. 111334

Application No. 09/960,735

APPENDIX

Changes to Claims:

Claims 22-33 are added.

The following is a marked-up version of the amended claims:

1. (Twice Amended) A rotary electric machine, comprising:

a rotor; and

a stator having a stator core with a plurality of slots and a poly-phase stator winding, wherein:

each phase winding of the poly-phase stator winding has a plurality of coils.

the slots include a plurality of regular slots located side by side and a plurality of irregular slots located side by side, and

each of the stator winding coils is comprised has a plurality of a continuous wires-wire wound at least one time around the stator core, the continuous wire having a plurality of in-slot portions accommodated in the slots and coil ends, the in-slot portions and the coil ends being arranged to provide a discontinuity of the stator winding at a region where the irregular slots are located, wherein the coils are located on the stator core in a manner that electrical phases of the coils are difference in 180 degrees.

21. (Amended) An alternator for vehicle, comprising:

a rotor;

a stator having a stator core and a poly-phase stator winding; ~~and~~

a rectifier that rectifies induced output from the poly-phase stator winding; and

a frame for supporting the rotor and the stator, wherein

each phase winding of the poly-phase stator winding has a plurality of coils,

each coil is made of a continuous wire, and the coils are located on the stator core in a manner that electrical phases of the coils are difference in 180 degrees.

Docket No. 111334

Application No. 09/960,735

the stator winding includes in-slot portions disposed in a plurality of slots having openings on an inside of the stator core, and coil end portions extended from an axial end of the stator core,

the in-slot portions including irregular in-slot portions disposed in irregular slots located side by side, and regular in-slot portions other than the irregular in-slot portions,

at least a part of strands of wire providing the regular in-slot portions being connected with other strands of wire providing the other in-slot portions disposed in the other two of different slots via the coil end portions,

each of the strands providing the irregular in-slot portions being connected with other strands providing the other in-slot portions disposed in another slot,

a strand of each phase of the stator winding being arranged in at least to a corresponding portion of strand of the other phase, and being wound with each other so that the strands are prevented from separation.